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EXAMINER

QIN, JIANCHUN

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/674,705	Applicant(s) BUTLER, KELLY M.	
	Examiner JIANCHUN QIN	Art Unit 2837	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☒ Claim(s) 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5 and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cipriani (U.S. Pat. No. 4951543) in view of Hannes (U.S. Pub. No. 20050150347).

With respect to claim 1:

Cipriani discloses a stringed instrument (Fig. 1) comprising: a body (2) having exposed front and rear surfaces (Fig. 1); a tuning mechanism (the tuning peg shown in Fig. 1); a neck having one end joined to said body and an opposite end retaining said tuning mechanism (Fig. 1); a retainer block (Fig. 4B, the plate embedded in the undersurface of the brace 20, upon which the enlarged end of the string is anchored) distinct from said body (Fig. 4B); a plurality of strings (4) each having a first end secured to said tuning mechanism (Fig. 1), and a second end retained by said retainer block (Fig. 4B).

Cipriani does not mention: said body is a solid body having exposed front and exposed rear surfaces; said retainer block is encompassed by said rear surface.

Hannes discloses a stringed musical instrument (Abstract), including: a solid body (510) having exposed front (500) and exposed rear (550) surfaces (Fig. _8); a retainer block (540) distinct from and encompassed by said rear surface of said body (Fig. _8); a string (600) having a first end secured to a tuning mechanism (10), and a second end retained by said retainer block (Fig. _8).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute Cipriani's retainer block for Hannes' retainer block in order to apply the invention of Cipriani retainer block to Hannes' solid body string instrument as an intended use, as motivated by Hannes (Fig. _8), such that the strings of the instrument can be robustly retained on the solid body of the instrument (Cipriani, col. 5, lines 20-23) by a structurally simple and easy-to-make mechanism (Cipriani, Fig. 4B) which would further facilitate the replacement of the strings (obvious to the structure and configuration of string-retaining means shown in Fig. _8 of Hannes).

With respect to claims 2-4:

Cipriani discloses: a bridge (6) mounted on said front surface and wherein said strings extend from said tuning mechanism, over said bridge, and through said body to said block (Figs. 1, 2, 3B and 4B); wherein said retainer block has an inner surface (the side touching the brace 20) and an outer surface (the side upon which the string is anchored) and defines a plurality of channels extending between said inner and outer surface, and each of said strings passes through a different one of said channels (Fig. 4B).

With respect to claims 5 and 11-13:

The teaching of Cipriani includes: said second ends are enlarged to prevent passage through said channels.

Cipriani does not mention expressly: each of said channels comprises a counterbore in the rear surface retaining one of said enlarged second ends; said body defines a cavity retaining said block and intersecting said rear surface.

The teaching of Hannes includes: each of said channels comprises a counterbore in the rear surface retaining one of said enlarged second ends (Fig. _8); said body defines a cavity retaining said block and intersecting said rear surface (Fig. _8).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Cipriani's retainer block, as taught by Hannes, to include a counterbore in the rear surface of the solid body for hiding one of said enlarged second ends in order to apply the invention of Cipriani retainer block to Hannes' solid body string instrument as an intended use, while having a means for protecting the enlarged ends of the strings without changing the appearance of the instrument significantly (obvious to the structure and configuration of string-retaining means shown in Fig. _8 of Hannes).

3. Claims 6-10 and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cipriani in view of Hannes, as applied to claims 1-3 and 11 above, and further in view of Kendall (U.S. Pat. No. 5260505).

With respect to claims 6 and 14:

Cipriani in view of Hannes teach the string instrument including the subject matter discussed above. Cipriani further teaches that said block is unitary (Fig. 4B, the plate embedded in the undersurface of the brace 20, upon which the enlarged end of the string is anchored).

Cipriani in view of Hannes do not mention expressly: said block is made of brass.

Kendall discloses a string retained for a stringed instrument wherein said string retainer is made of brass (col. 7, lines 19-28).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the teaching of Kendall in the combination of Cipriani and Hannes in order to make the string retainer block more durable (Kendall, col. 7, lines 23-24).

With respect to claims 7, 8, 9, 15 and 16:

Teaching of Cipriani includes: a bridge (6) mounted on said front surface and wherein said strings extend from said tuning mechanism, over said bridge, and through said body to said block (Figs. 1, 2, 3B and 4B); a plurality of strings (4, 4', 4'') each having a first end secured to a tuning mechanism (1) and a second end retained by a retainer block (Fig. 4B, the plate embedded in the undersurface of the brace 20, upon which the enlarged end of the string is anchored); wherein said retainer block has an inner surface (the side touching the brace 20) and an outer surface (the side upon which the string is anchored) and defines a plurality of channels extending between said inner and outer surface, and each of said strings passes through a different one of said channels (Fig. 4B).

With respect to claim 10:

Cipriani teaches a plurality of channels through which the strings pass and are fastened (Figs. 3B and 4B) except: wherein each of said channels comprises a counterbore in the rear surface retaining one of said enlarged second ends.

The teaching of Hannes includes: each of said channels comprises a counterbore in the rear surface retaining one of said enlarged second ends (Fig. _8); said body defines a cavity retaining said block and intersecting said rear surface (Fig. _8).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Cipriani's retainer block, as taught by Hannes, to include a counterbore in the rear surface of the solid body for hiding one of said enlarged second ends in order to apply the invention of Cipriani retainer block to Hannes' solid body string instrument as an intended use, having a means for protecting the enlarged ends of the strings without changing the appearance of the instrument significantly (obvious to the structure and configuration of string-retaining means shown in Fig. _8 of Hannes).

Allowable Subject Matter

4. Claim 17 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Reasons for Allowance

5. The following is a statement of reasons for the indication of allowable subject matter:

The primary reason for the allowance of claim 17 is the inclusion of the limitation that the solid body defines a slot from the front surface through the body, and wherein the plurality of strings extend through the slot. It is this limitation found in the claim, as it is claimed in the combination that has not been found, taught or suggested by the prior art of record, which makes this claim allowable over the prior art.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Response to Arguments

7. Applicant's arguments received 03/03/08 with respect to claims 1-16 have been considered but they are not persuasive.

In reference to the Hannes patent, Applicant argued that “[t]he strings 600 do not extend through a retainer block encompassed by a rear surface of the body 510.” The Examiner’s position is that, giving the claims the broadest reasonable interpretation, Hannes does disclose or suggest or teach: a stringed musical instrument (Abstract), including: a solid body (510) having exposed front (500) and rear (550) surfaces (Fig. _8); a retainer block (540) distinct from and encompassed by said rear surface of said body (Fig. _8); a string (600) having a second end retained by said retainer block (Fig. _8). Applicant’s argument is therefore not persuasive.

In response to applicant's argument that there is no suggestion to combine the references, the Examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). The Examiner further recognizes that the test for obviousness is not whether the features of a second reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208

USPQ 871 (CCPA 1981). In the instant case, it is deemed that all the cited prior art references are in the same area of endeavor. Both Cipriani and Hannes teach the means for retaining strings to the body of the string instrument, in which Cipriani's retainer block is obviously simpler in structure and easy to make, and more importantly, would provide greater exertion of force on the body of the instrument. As reformatted in section 2 above in this office action, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the invention of Cipriani retainer block to Hannes' solid body string instrument as an intended use, by substituting Cipriani's retainer block for Hannes' retainer block, in order to provide the solid body stringed instrument with a string-retaining mechanism through which the strings can be robustly retained on the solid body by a structurally simple and easy-to-make retained block, and which would further facilitate the replacement of the strings. It has been held that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). Applicant's arguments regarding the motivation to combine the cited references are thus not persuasive. The rejection is maintained.

Applicant's argument with respect to claim 17 is persuasive. The allowable subject matter recited in this claim is indicated as set forth in sections 4 and 5 above.

Contact Information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jianchun Qin whose telephone number is (571) 272-5981. The examiner can normally be reached on 8am - 5:30pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lincoln Donovan can be reached on (571) 272-1988.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. Q./

Primary Examiner, Art Unit 2837

/Lincoln Donovan/

Supervisory Patent Examiner, Art Unit 2837